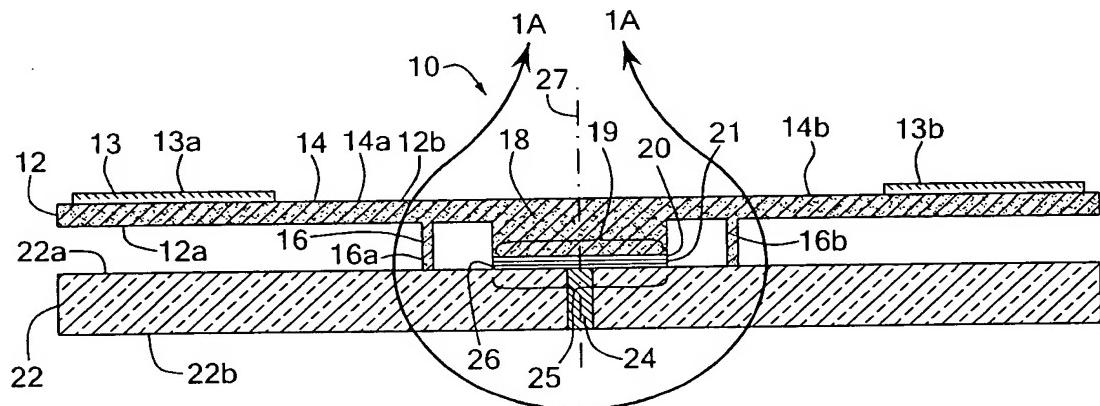
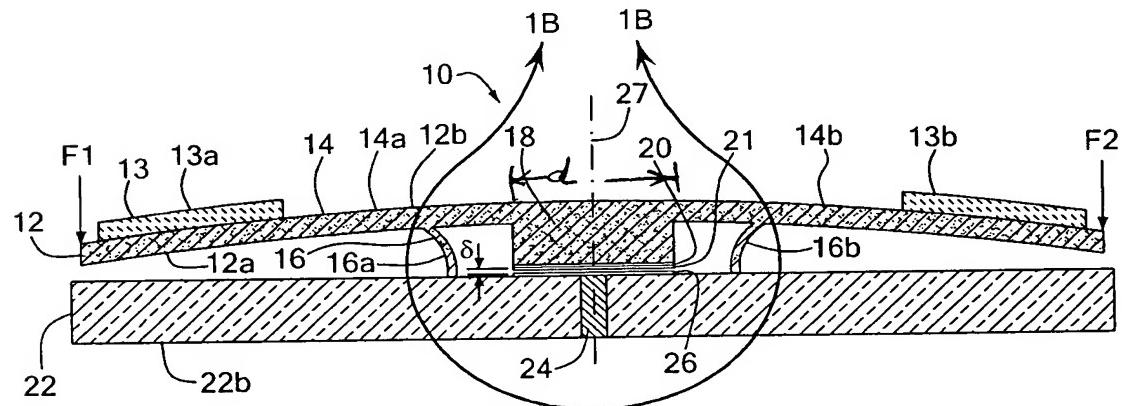


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**FIG. 1**



**FIG. 1B**

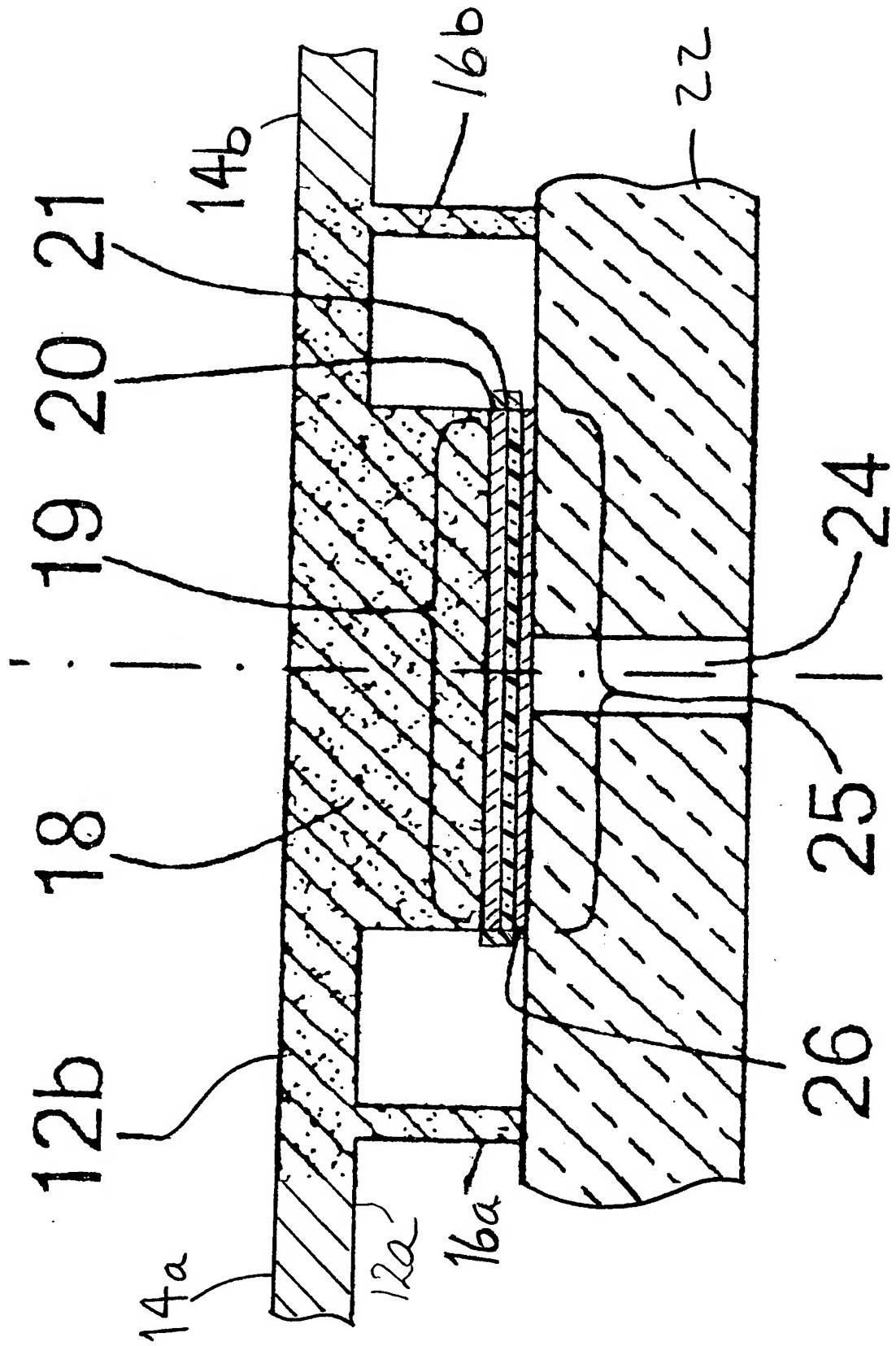


FIG. 1A

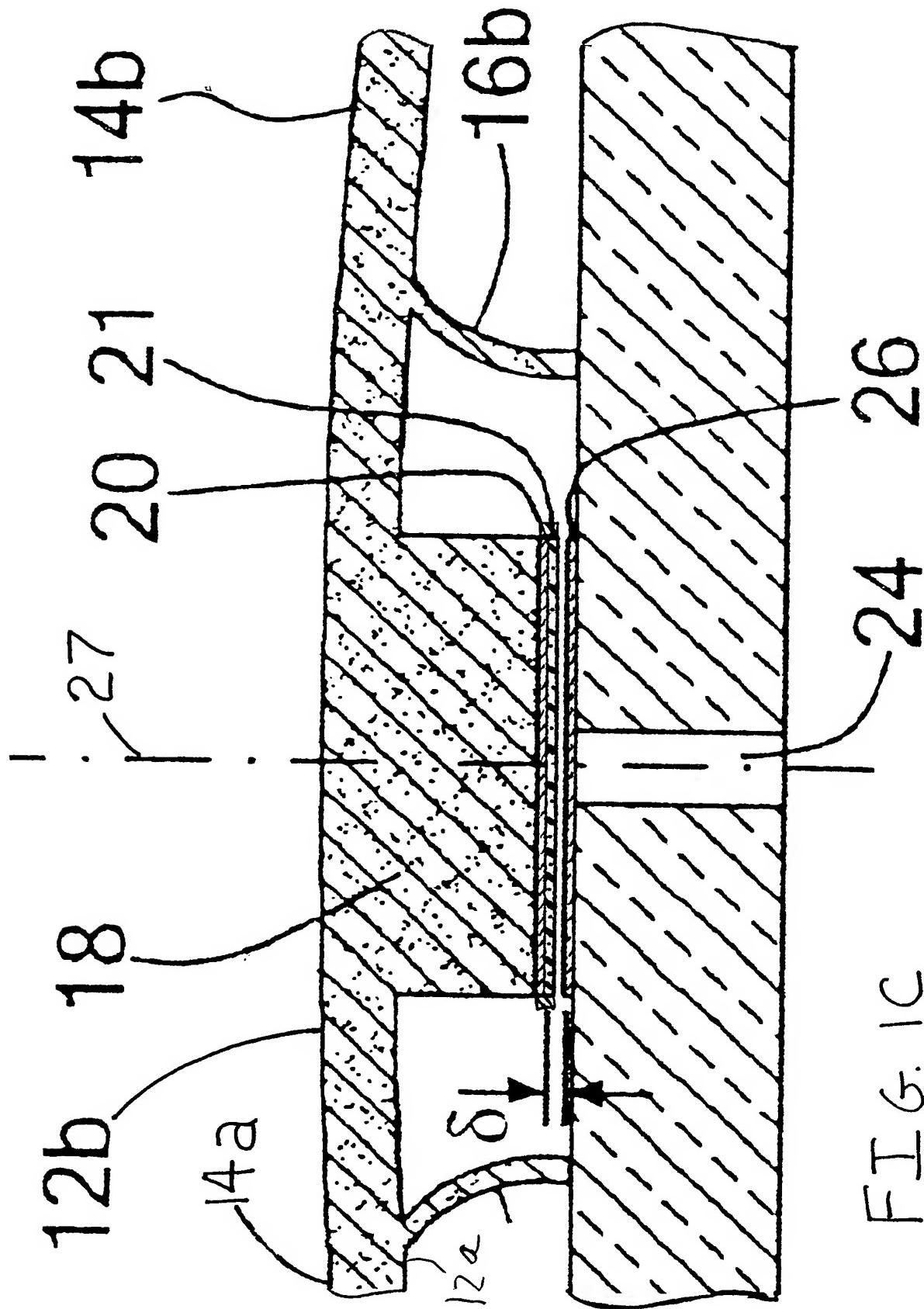
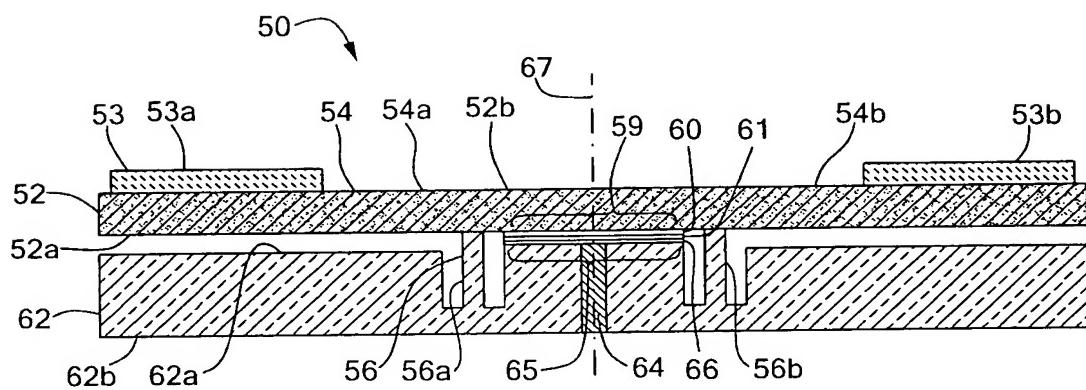
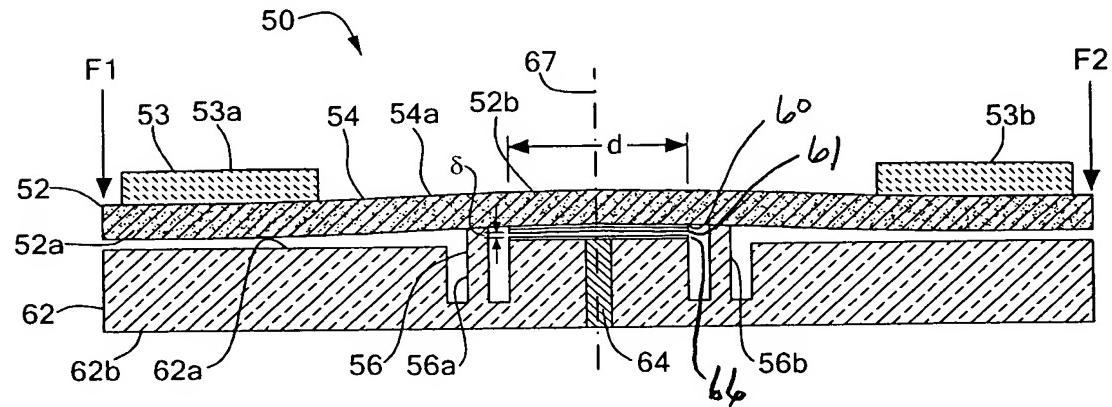


FIG. 1C



**FIG. 2**



**FIG. 2A**

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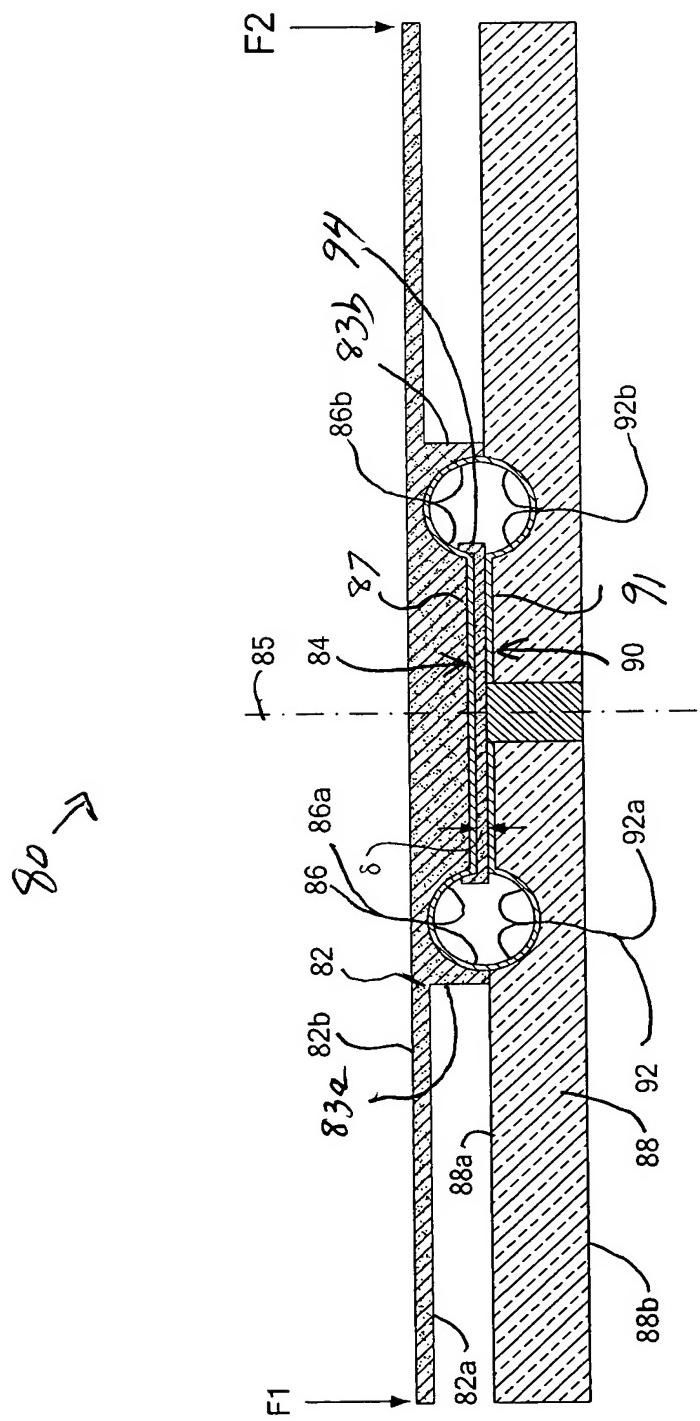


FIG. 3

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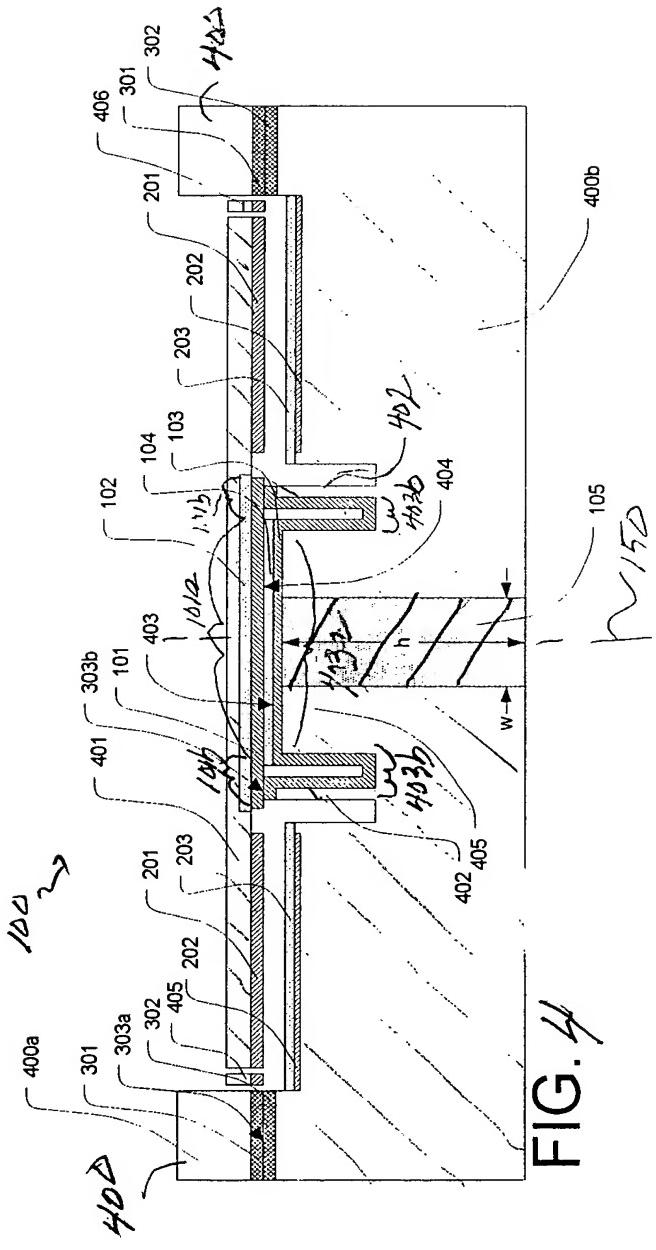


FIG. 4

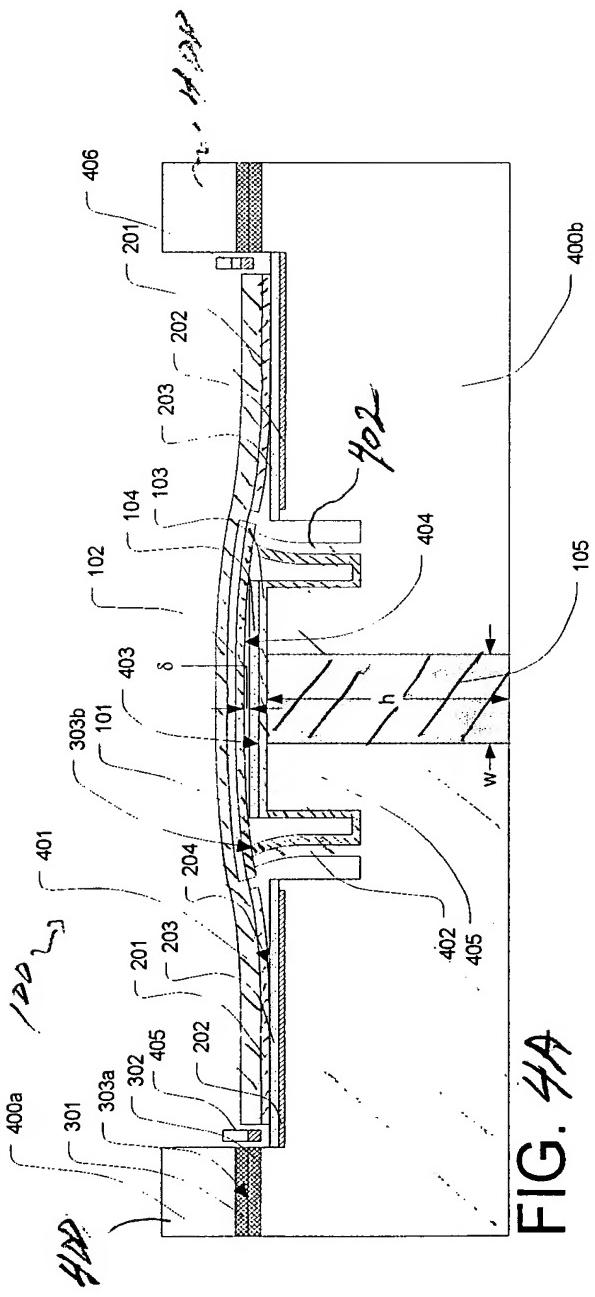


FIG. 4A

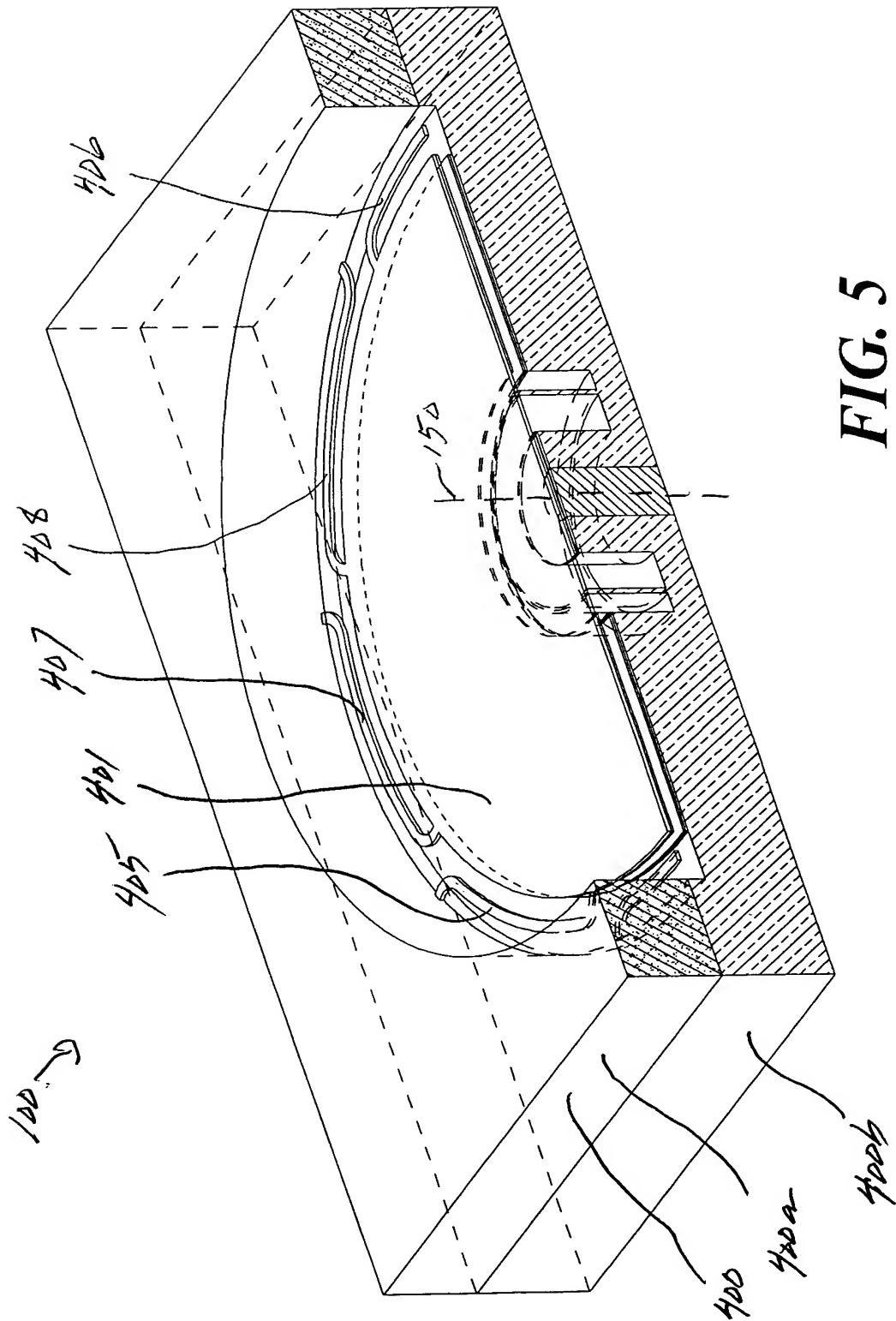


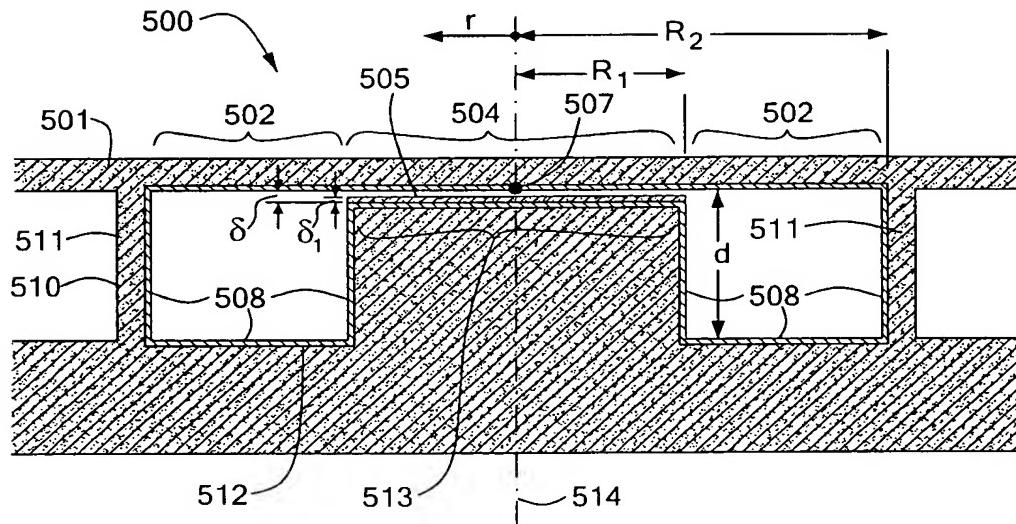
FIG. 5

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*FIG. 6*

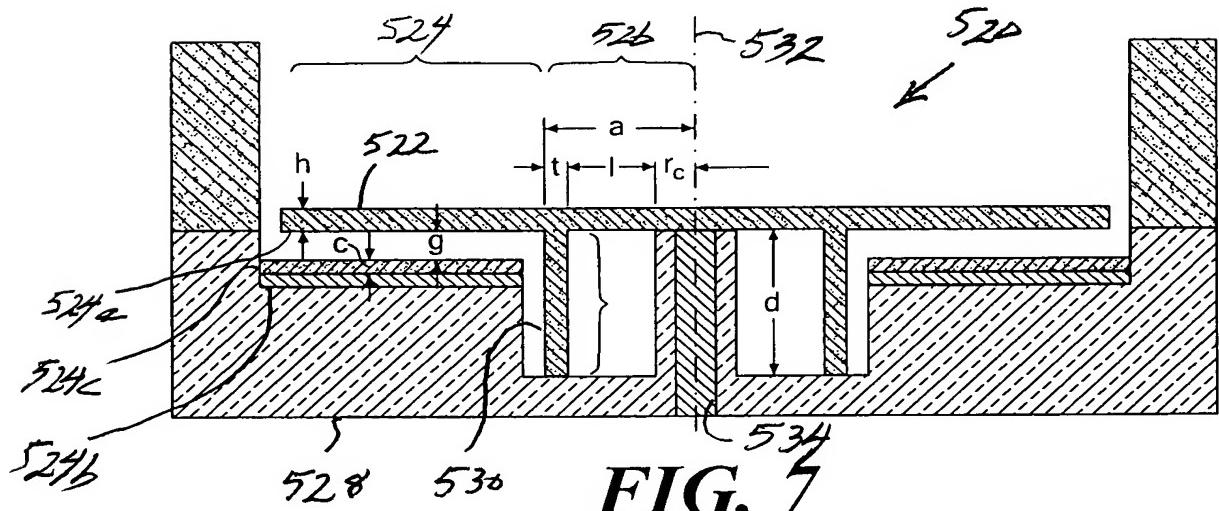


FIG. 7

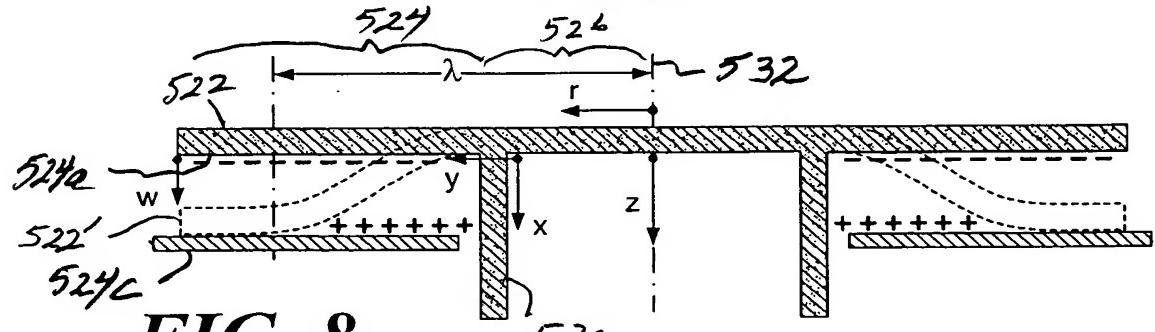


FIG. 8

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600  
↙

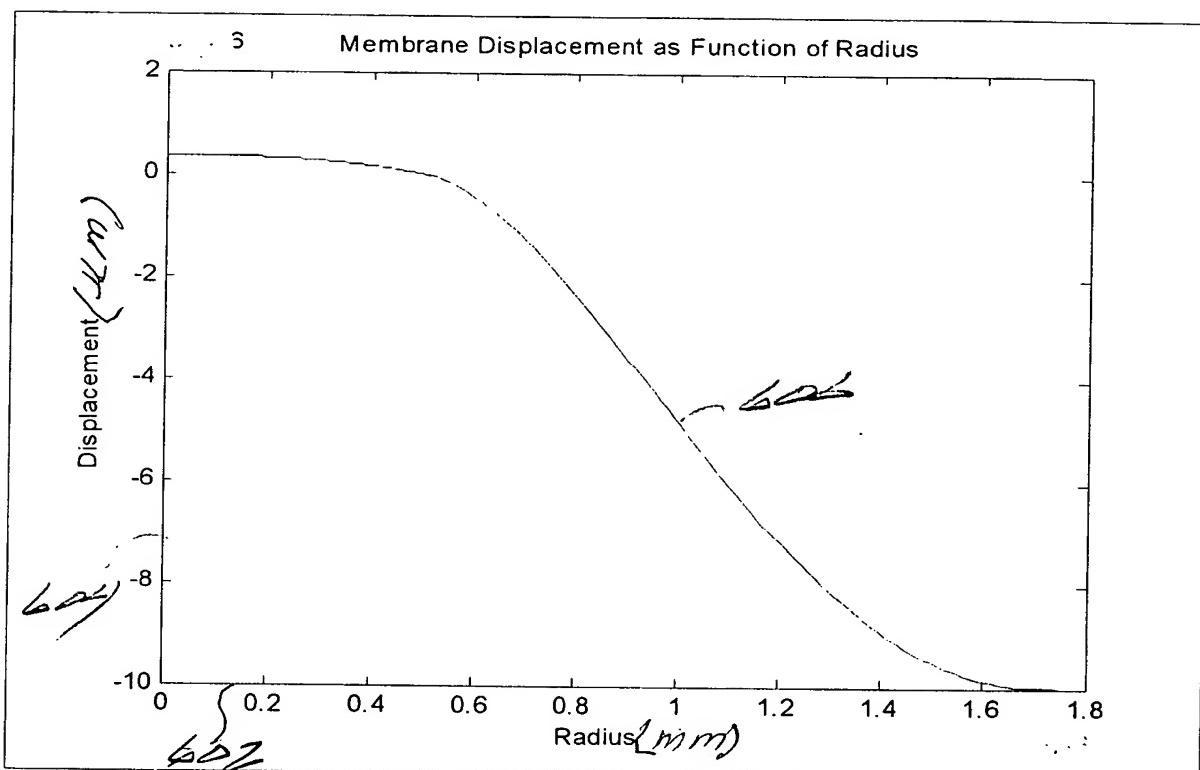


FIG. 9

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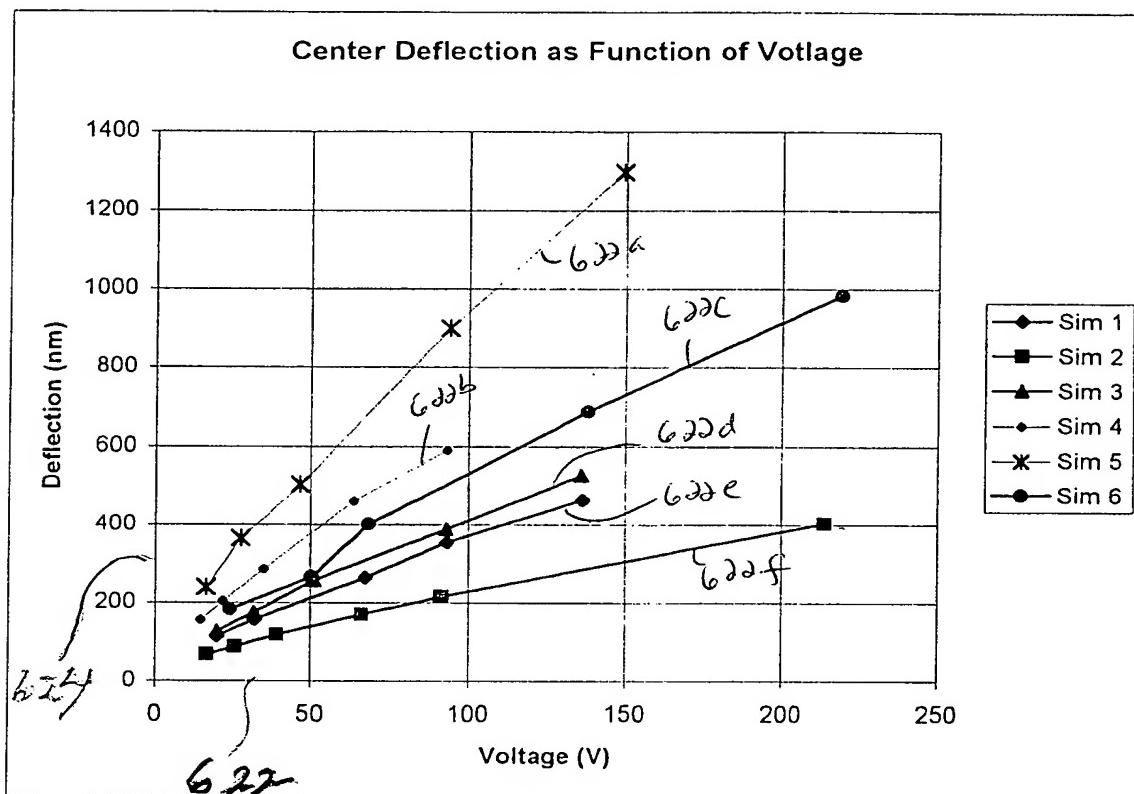


FIG. 10

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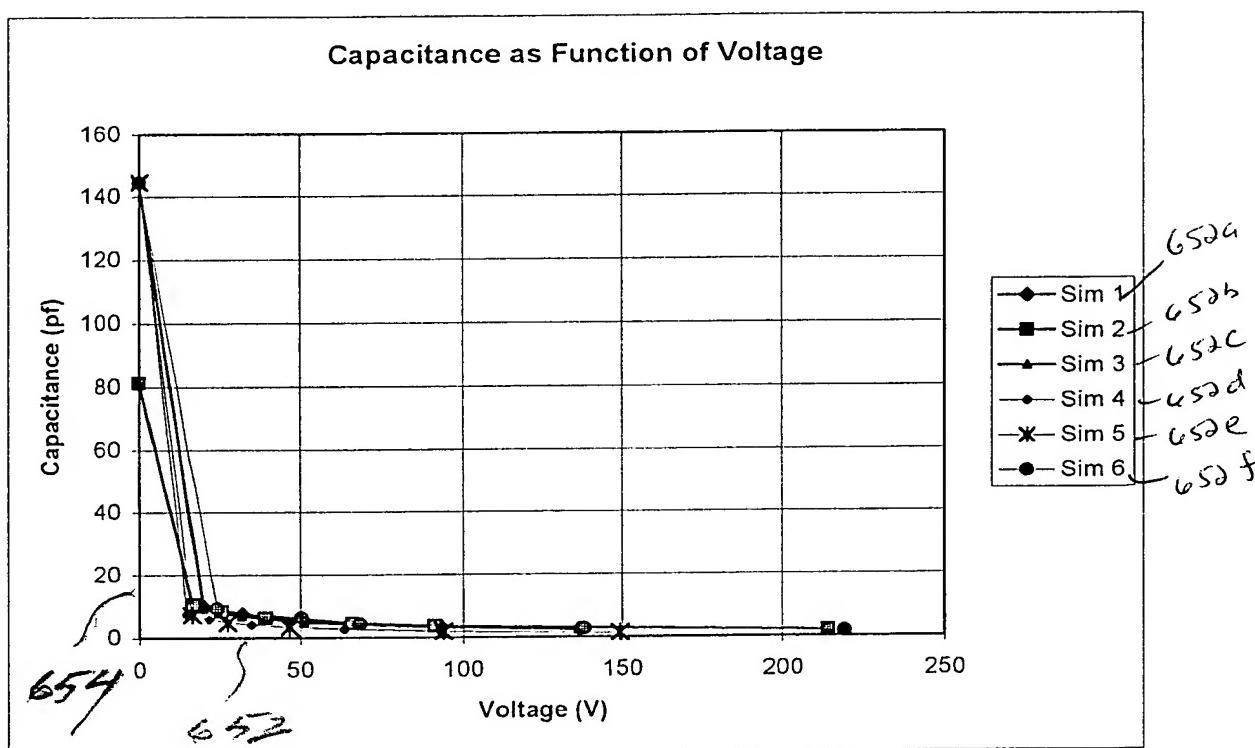
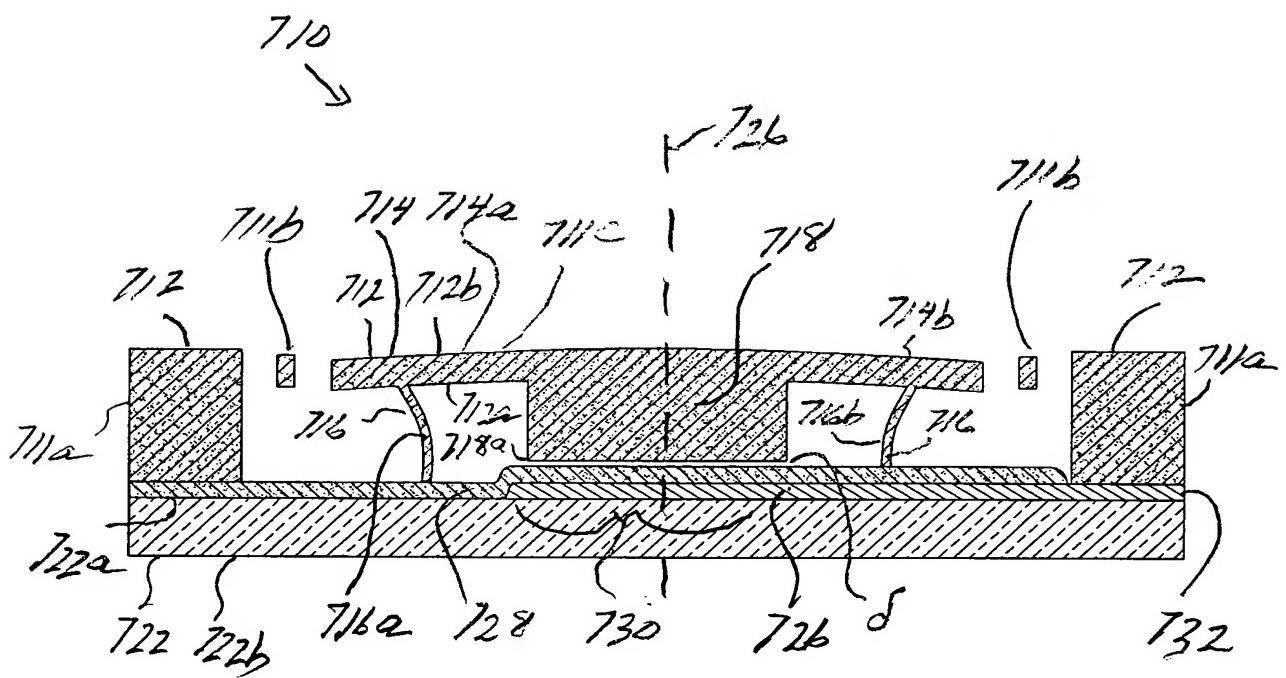


FIG. 11





**FIG. 13**

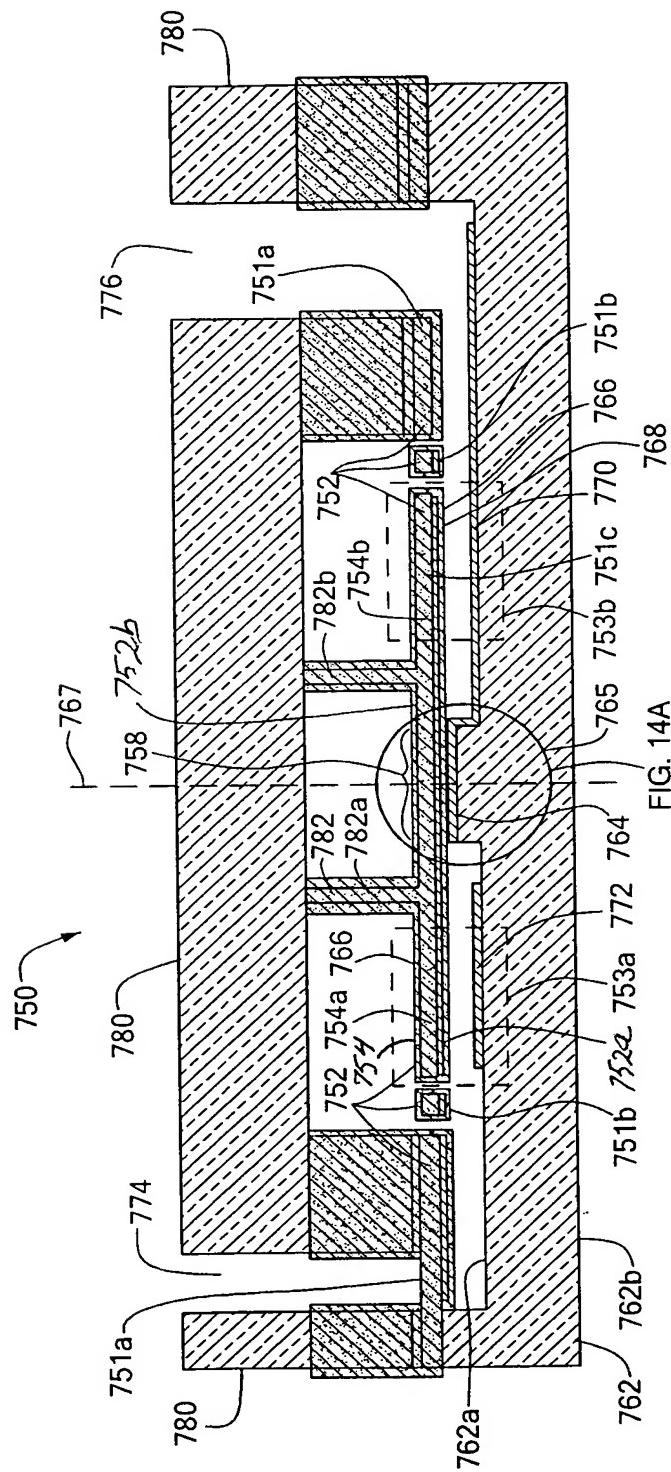
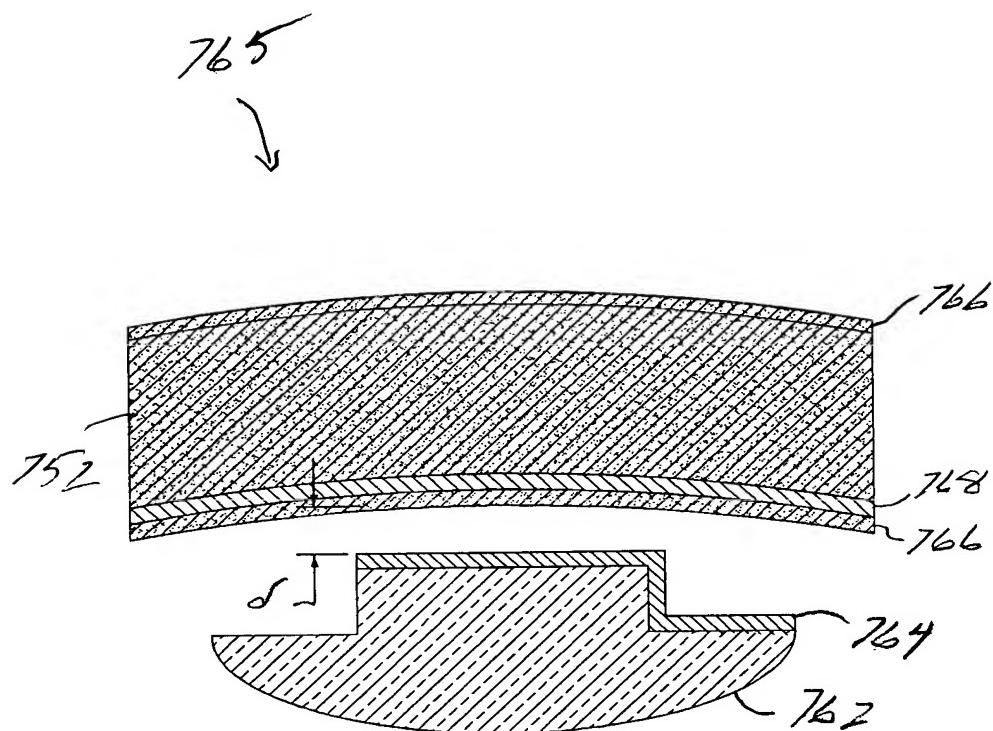


FIG. 14A

**FIG. 14**

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**FIG. 14A**

800

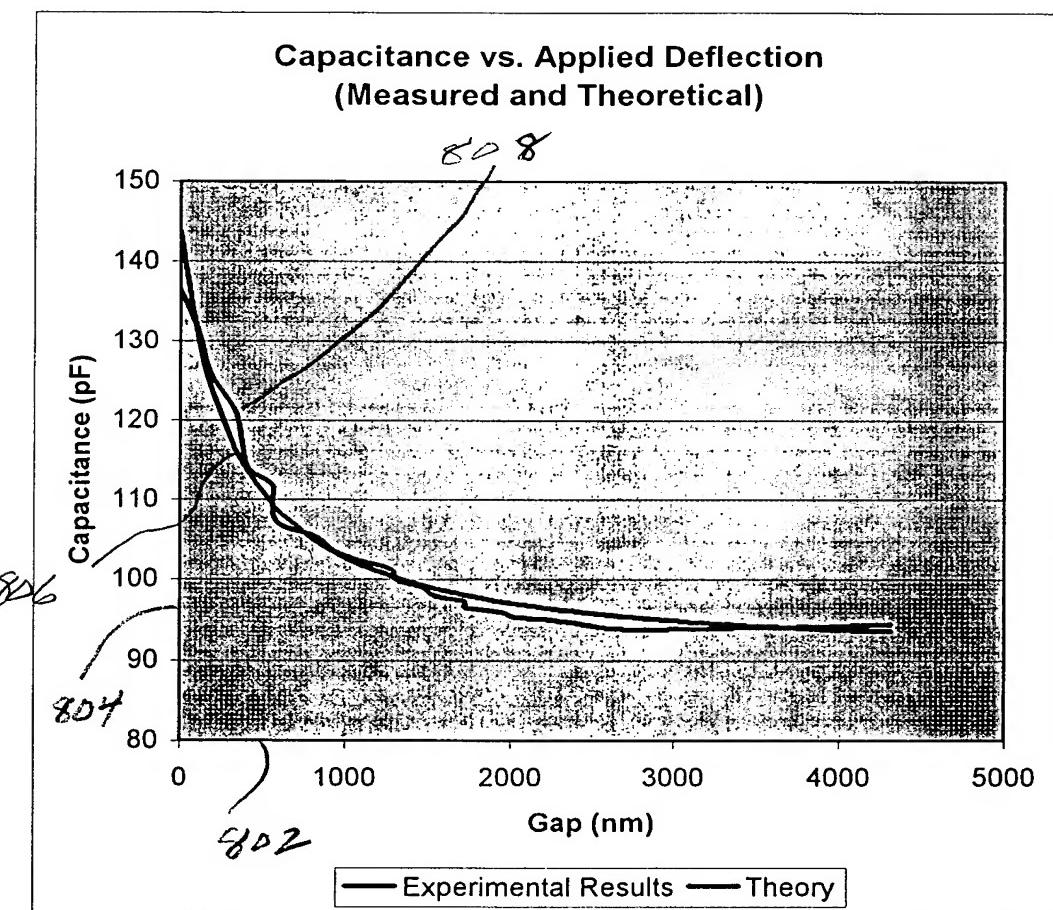


FIG. 15

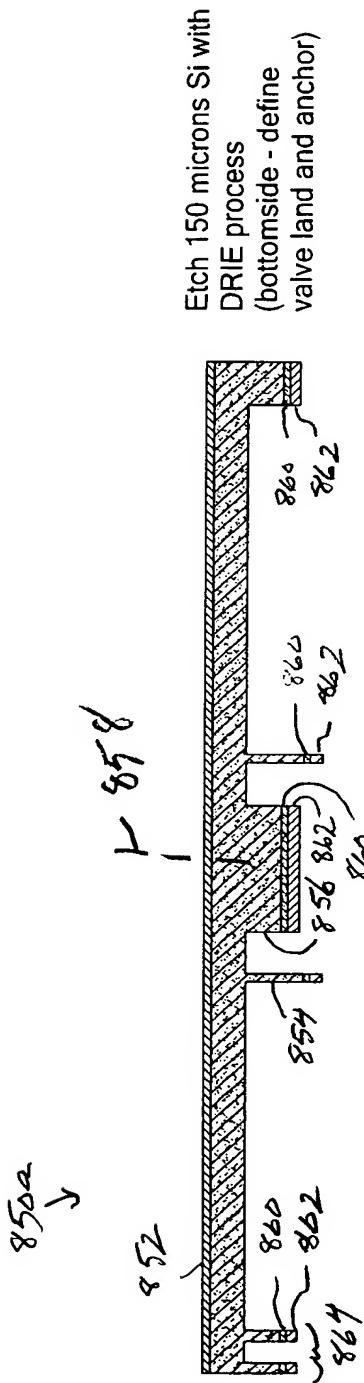


FIG. 16

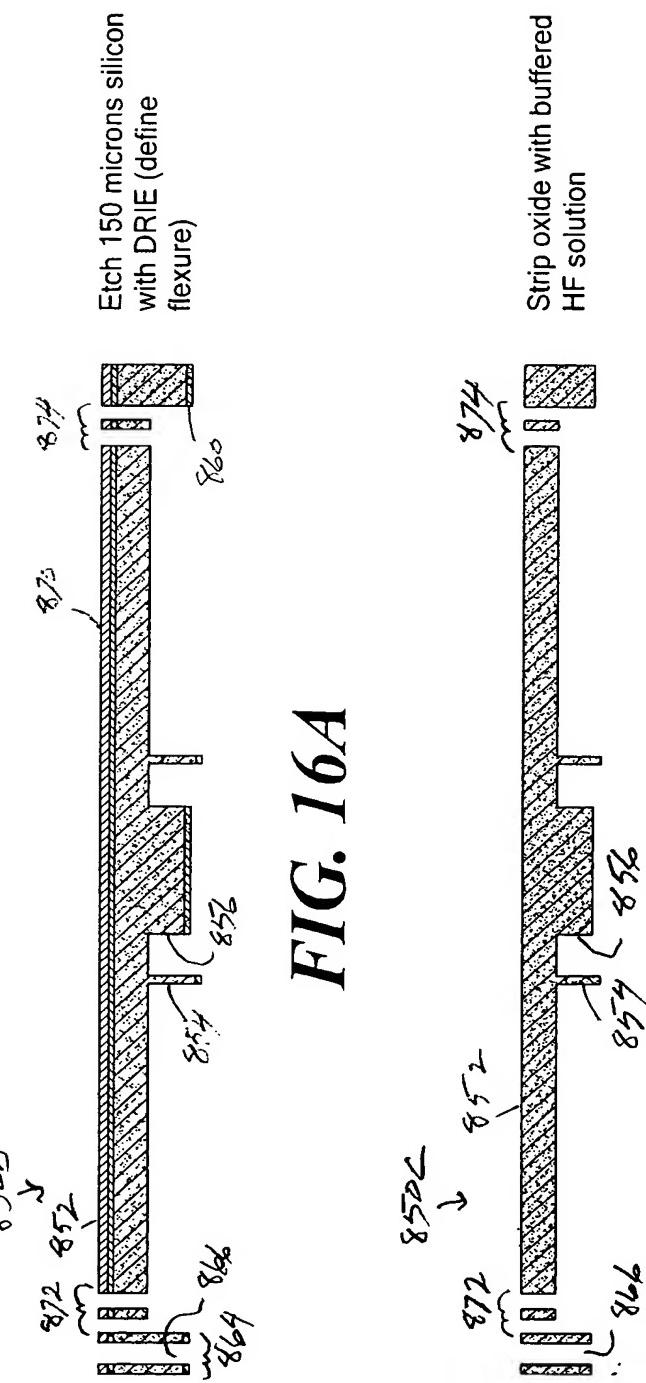


FIG. 16A

FIG. 16B

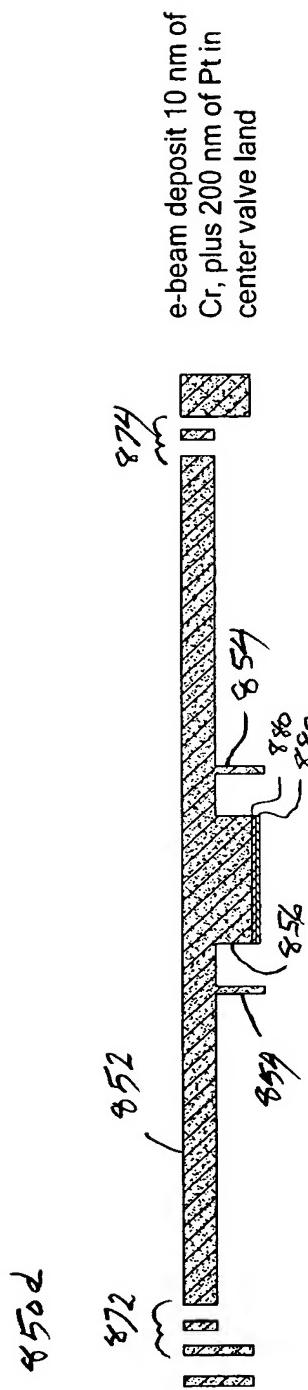


FIG. 16C

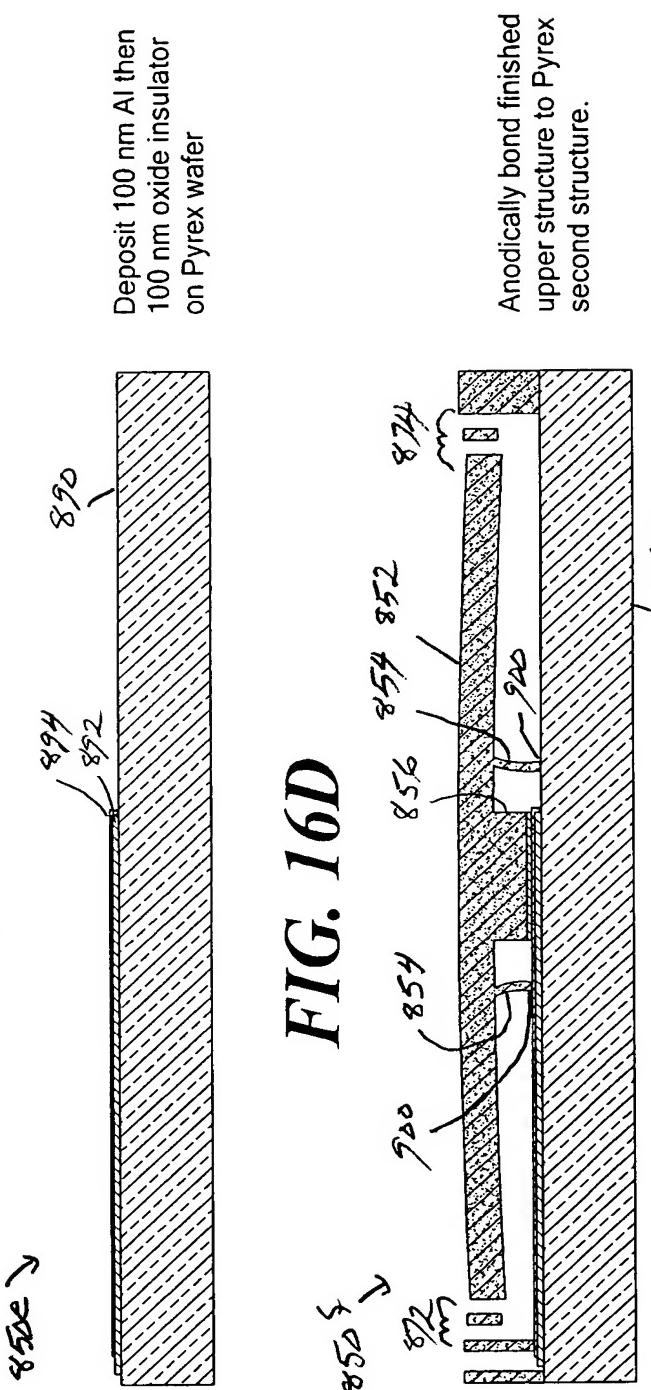
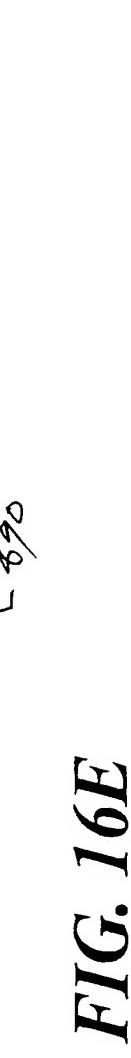
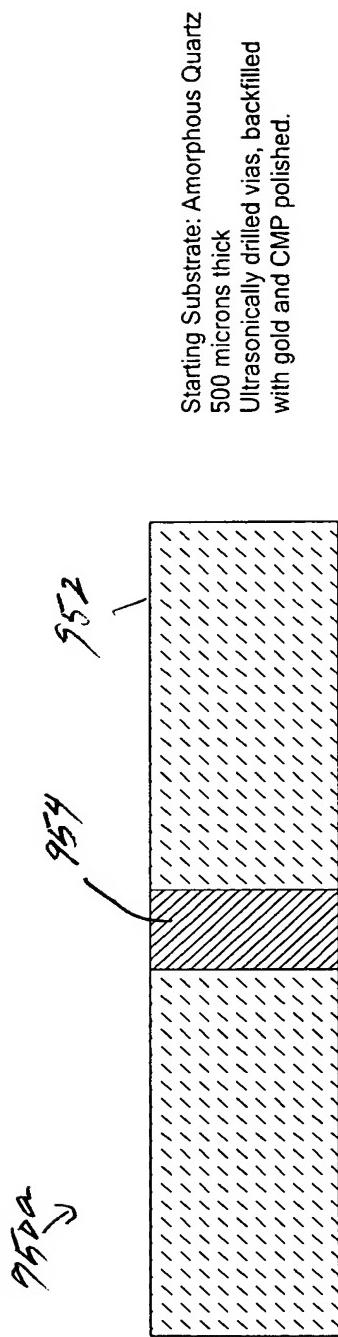
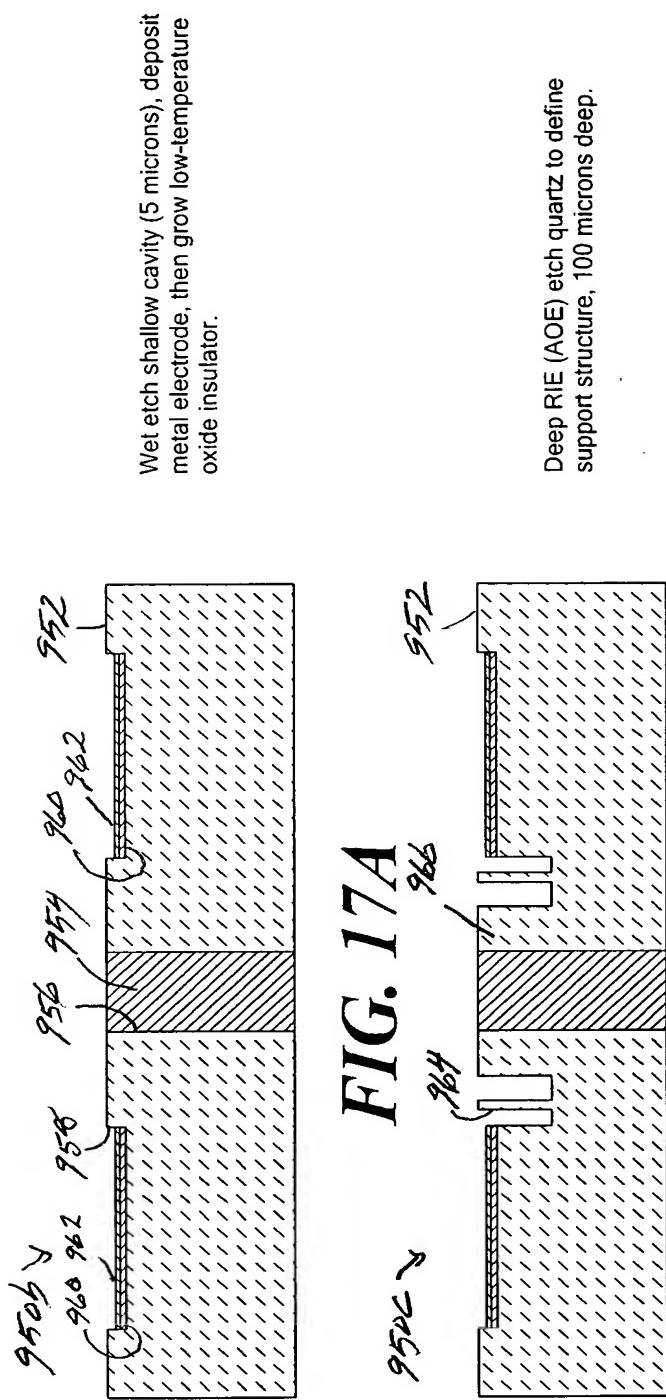


FIG. 16D

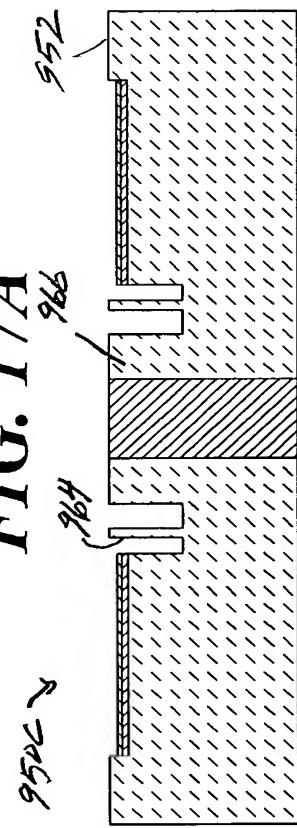




**FIG. 17**

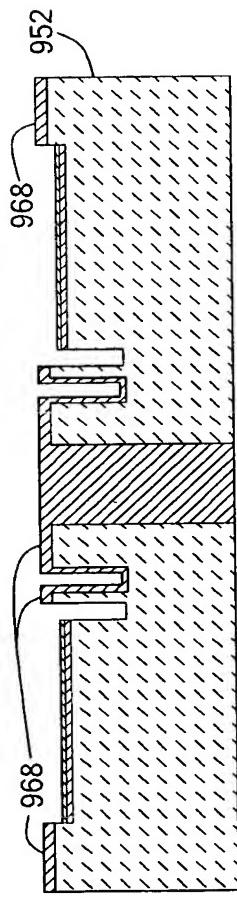


**FIG. 17A**



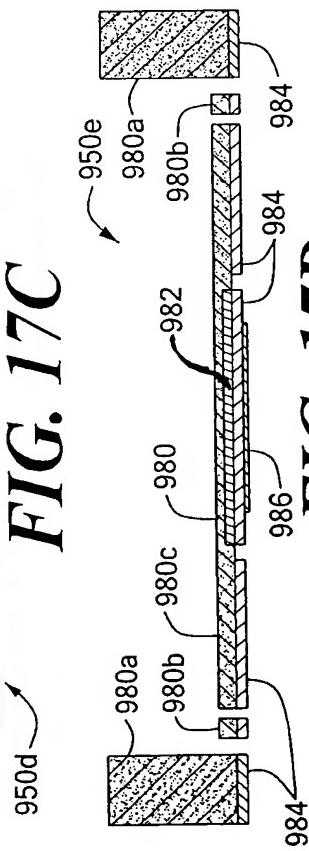
**FIG. 17B**

Sputter Ti/Pd seed layer through shadow mask; electroless plate gold metallization.  
Finished bottom wafer.



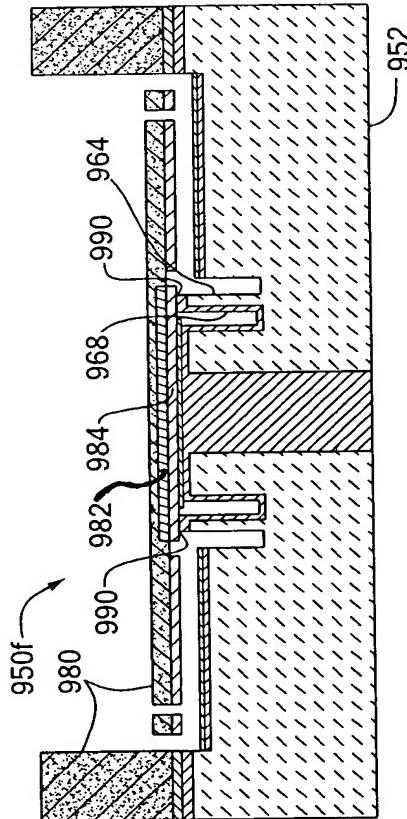
**FIG. 17C**

Top Wafer:  
Etch trench and backfill with insulating oxide  
Frontside metallization of diaphragm to define  
LC tank and actuator regions  
Deposition of thin insulating layer over capacitor  
region.  
Backside etch to define diaphragm.



**FIG. 17D**

Thermocompression Au-Au bonding of top  
flexure and bottom substrate.  
(low-temperature, microwave assisted)  
The insulating layer prevents bonding  
of the capacitor structure.



**FIG. 17E**

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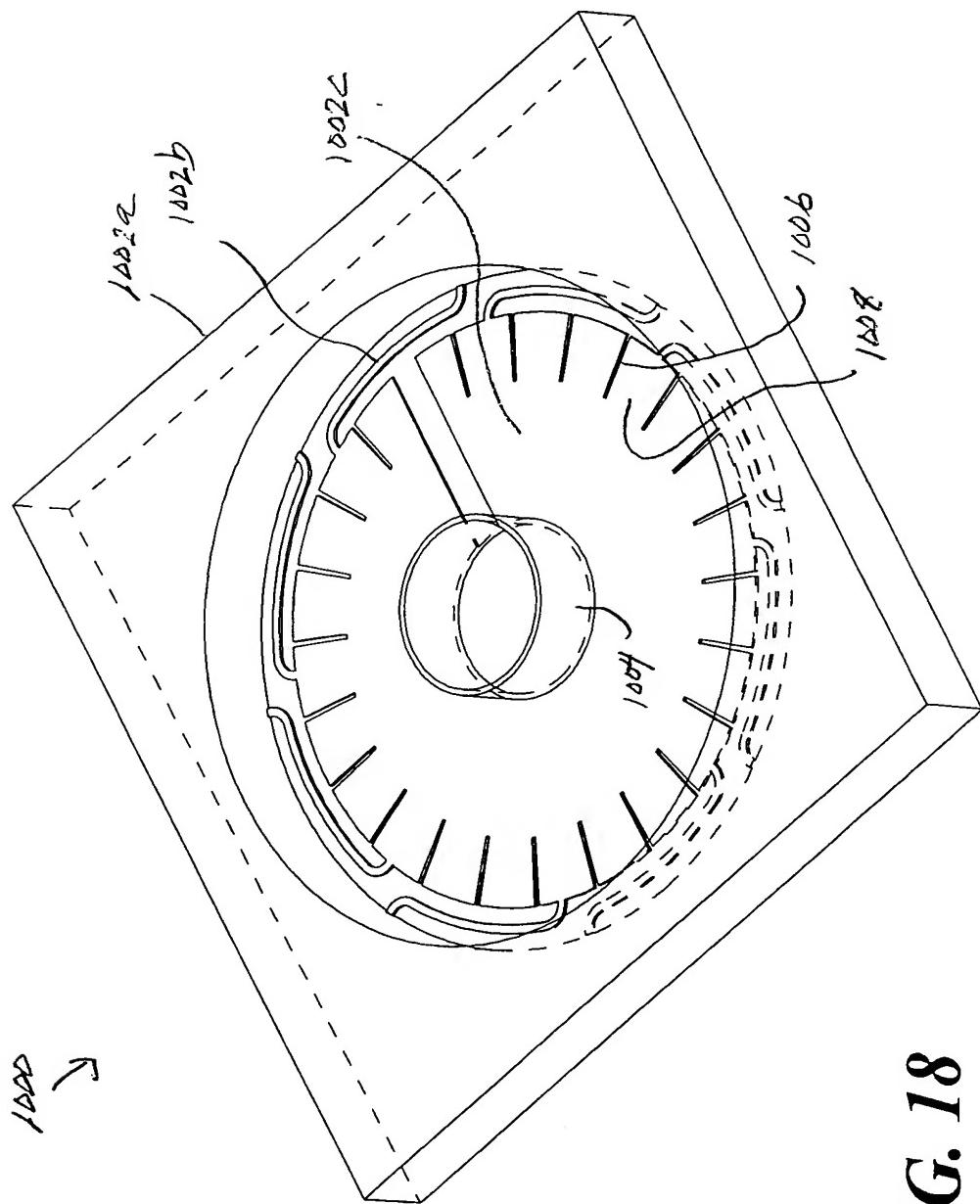


FIG. 18

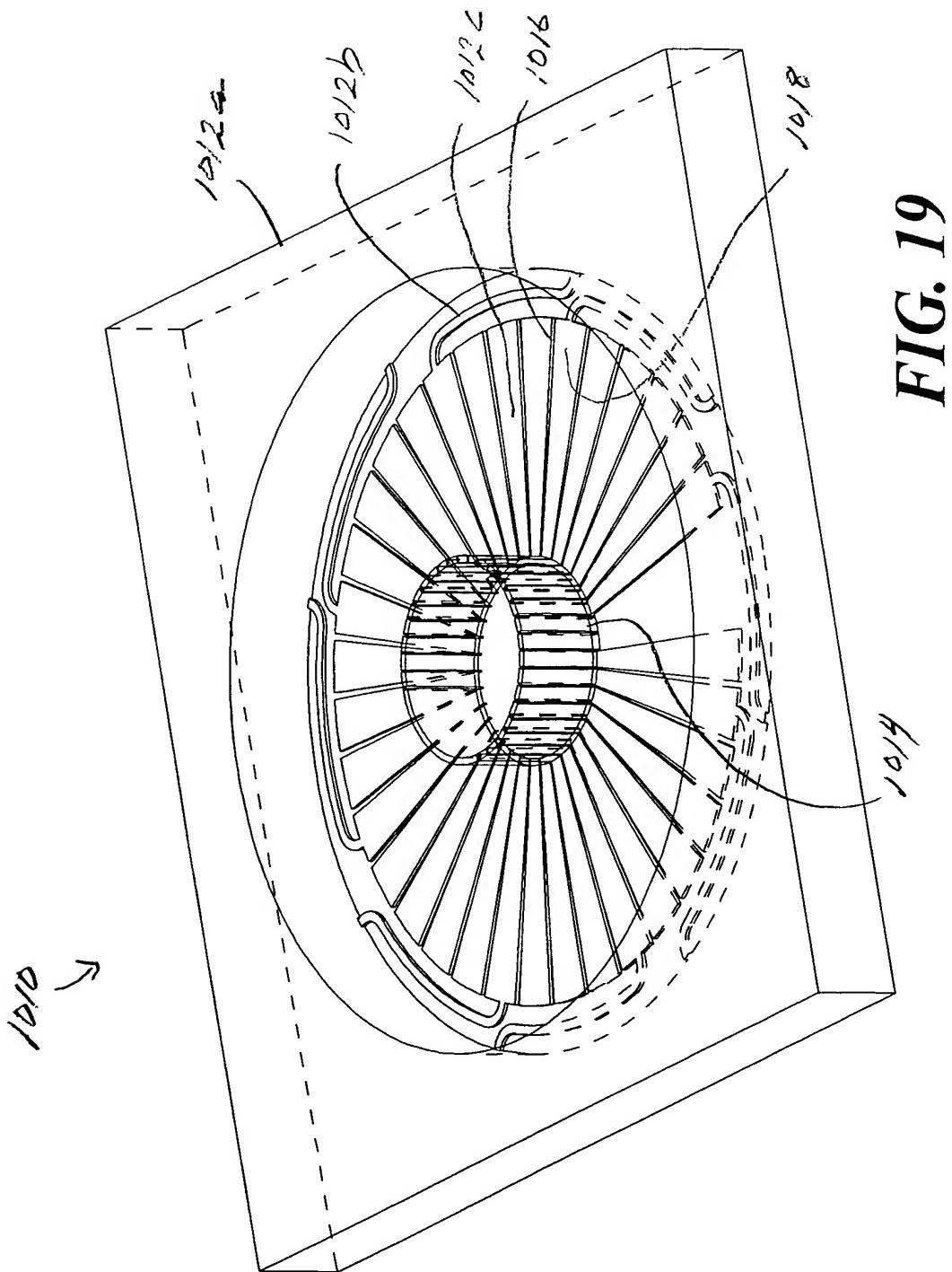


FIG. 19